

nori

**THE ACCRINGTON
BRICK & TILE
COMPANY**



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CHEMICAL
AND
ABRASION
RESISTANT
CERAMICS

Accrington Nori Chemical and Abrasion Resistant Ceramics have been successfully used in the following industries:

Armaments

Breweries and Distilleries

Carbonated Drinks

Cement

Chemicals

Confectionary

Dairies

Dyestuffs

Energy

Fertilizer

Flue Gas Desulphurisation

Foods

Metallurgical

Petrochemical

Pharmaceutical

Plastics

Power

Pollution Control

Pulp and Paper

Sewerage

Transport

Waste Treatment

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Founded in 1887, The Accrington Brick and Tile Company has been a major innovator in the manufacture and application of chemical and abrasion resistant bricks for over a century. The strength, durability and reputation of Accrington NORI products are known throughout the world.

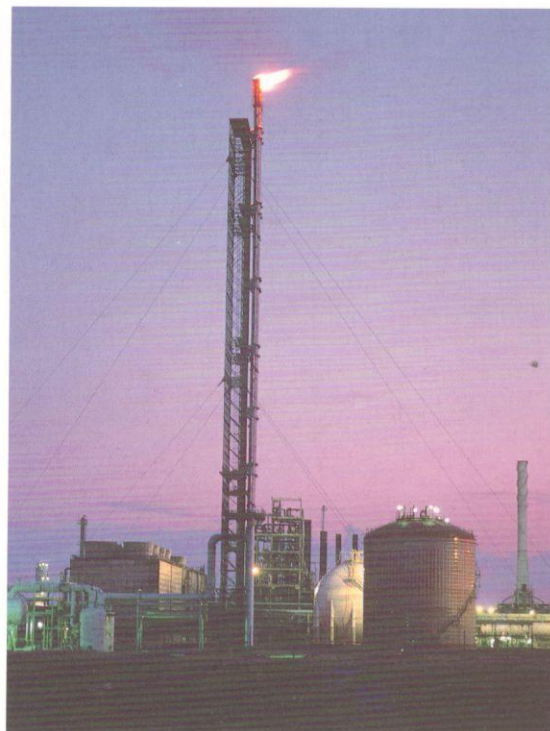
The consistent mineralogy of the Accrington NORI red shale deposits and its capability to be fired to a highly vitrified state result in a product exhibiting properties of chemical and abrasion resistance to most chemicals and materials. Through a constant dialogue with users and engineers we have developed the product into a range of Accrington NORI chemical and abrasion resistant bricks, pavers, tiles and linings serving the chemical, power, metallurgical and associated industries internationally.

Always striving to remain at the forefront of brick making technology the Accrington NORI factory operates two of the most modern brick making plants in the world. The plants incorporate the latest microprocessor controls. Computer aided procedures for the supervision of production and testing of products have enabled the plants to gain full quality assurance certification to ISO 9002 (BS5750 Part 2). The high quality products have a proven track record for flooring in process areas and the lining of reaction vessels, columns, tanks, effluent pits, packed towers, gas scrubbers, hoppers and chimneys.

Today, the Accrington Brick and Tile Company is part of Marshalls Clay Products Limited, a subsidiary of Marshalls Plc. Marshalls are one of the UK's leading manufacturers of building products.

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Applications: Column, Pit &

The excellent properties of chemical, abrasion and impact resistance exhibited by Accrington NORI products are being utilised throughout the world providing effective and economic linings to process vessels, tanks, towers, columns, pits and hoppers.

Quality control during design and manufacture, coupled with on-site checks lead to the installation of high quality linings renowned for their durability and long-term performance even under arduous process operating conditions.

The lining systems offered are of the multi-layer type supported by an outer shell, normally of steel or concrete, providing strength and rigidity. The multiple layers comprise a membrane and one or more layers of chemical resistant ceramics bedded and jointed in a chemical resistant mortar. This lining system apart from protecting the shell from chemical attack and mechanical shock, also acts as a thermal barrier.

A design service for vessel linings is offered by our technical team at Accrington. They prepare detailed CAD drawings to meet the process conditions within the vessel. Membranes, mortar and brick types, sizes and quantities will all be specified, giving the client a complete package to solve his corrosion and abrasion problems.



Vessel, Tank, Tower, Hopper Linings



APPLICATIONS

Examples of the demanding applications Accrington NORI chemical and abrasion resistant masonry stand up to include:

Absorption Towers	Digestors	Salt Pans
Acid Tanks	Drying Towers	Scrubbing Towers
Air Drying Towers	Dyestuff Plants	Steaming Towers
Brine Saturators	Effluent Pits	Stills
Bulk Storage Bunkers	Evaporative Coolers	Storage Vessels
Calciners	Entrainment Separators	Stripping Columns
Chutes	Galvanising Pits	Sulphur Pits
Coal and Ash Hoppers	Humidifying Towers	Troughs
De-aerating Pots	Neutralisation Tanks	Venturi Scrubbers
De-nitration Towers	Pickle Lines	Wash Towers
Dephlegmators	Process Vessels	

Applications and Bund Areas

Accrington NORI chemical and abrasion resistant industrial floor tiles and pavers and complementary components provide durable and trouble free flooring which is resistant to most acids and other chemicals. Their high density, impact resistance and abrasion resistance are able to stand up to heavy trucking, high point loading and substantial impact. Accrington NORI chemical and abrasion resistant pavers also withstand the thermal shock of steam cleaning or accidental spillage of hot materials.

The pavers are available with smooth or anti-slip surfaces. The smooth paver provides a floor with sufficient tractive resistance for most purposes, even under wet conditions.

A range of components complementary to the tiles and pavers is available to meet all aspects of floor design. In addition to the standard pavers there are rebates, bullnoses, angles, skirtings, channels and outlets. Flooring systems and bund applications specially designed, free of charge, by members of our Accrington based technical team are available to order.

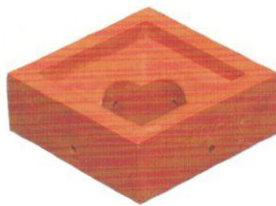
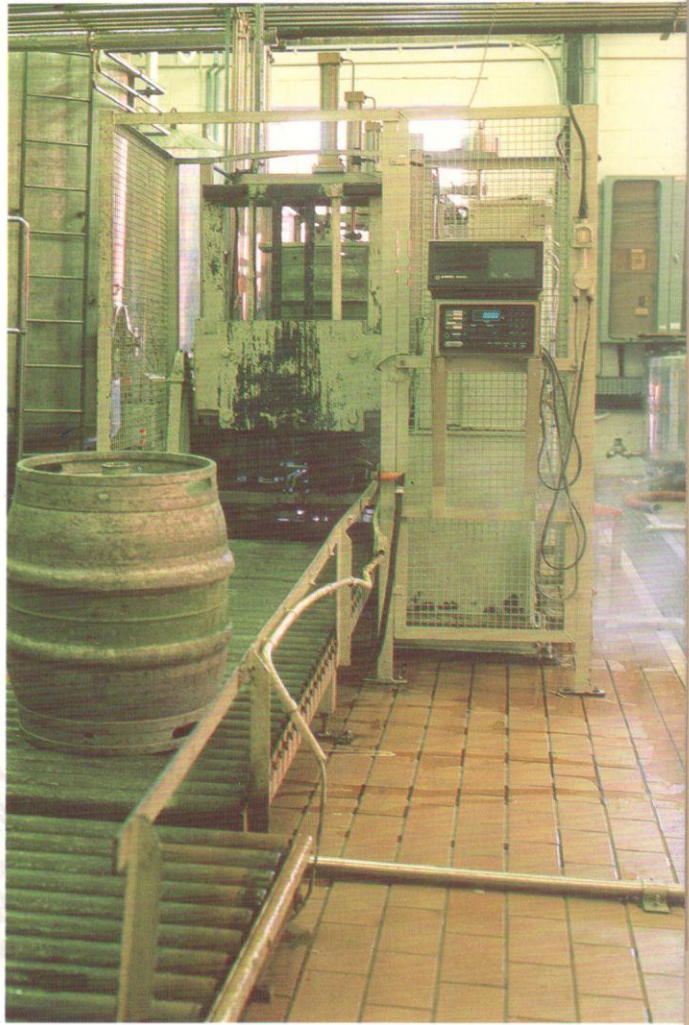
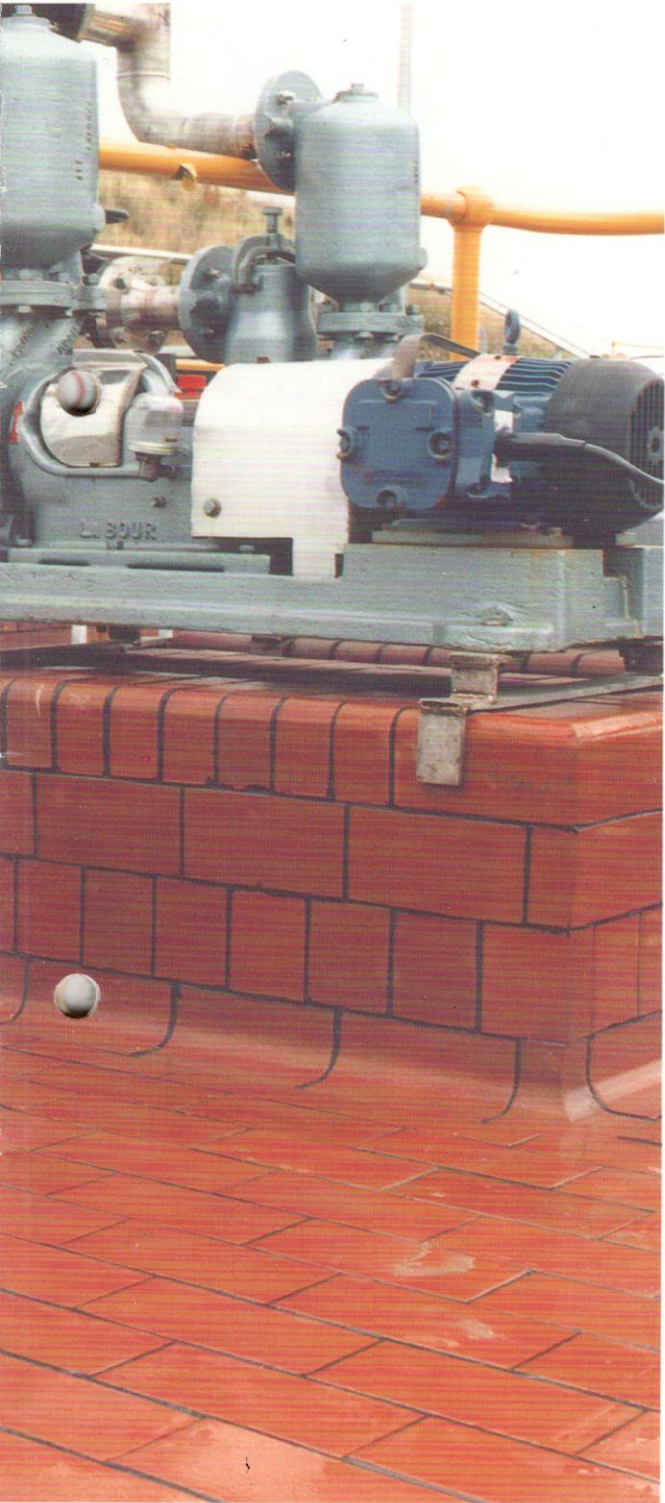
Accrington NORI chemical and abrasion resistant pavers are ideal for heavy duty flooring and bunds in all industries. They have been used in a wide variety of applications throughout the world. Extensive use has been made of the range of pavers in the petrochemical, pharmaceutical and other chemical industries in Europe, the Middle East, Africa, Australia and the Far East. The pavers are also to be found resisting the aggressive chemicals of many international dye-stuffs and fibre companies. Dairies, breweries and manufacturers of other foods and beverages find that the pavers also stand up to both the heavy trucking and steam cleaning common to their industries. The strength and durability of the pavers are put to an extreme test in withstanding the chemical attack and mechanical damage prevalent in the metallurgical industry and, in particular, on the floor areas of steel pickling lines.



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Flooring as



Applications: Gas Desulphur

Accrington NORI chemical and abrasion resistant masonry is used for the lining of chimneys, scrubbers, ductwork, thickener tanks, ash hoppers, absorber towers and bund walls at power stations, incinerators, etc. A variety of standard, tapered, radial arch, circular and corbel drip bricks and many other custom fabricated shapes are available for such linings. The standard bricks can accommodate a diameter greater than 11000mm whereas a tapered end brick is an economical solution for diameters between 11000mm and 6000mm. Circular bricks are recommended for diameters between 6000mm and 2000mm.

On chimneys, the masonry linings serve as a chemical and abrasion resistant barrier against gases, liquids and solids, thereby protecting the wind shield. The high strength combined with a low absorbency and minimal acid permeation give a robust and durable lining which will ensure many years service. The high compressive strength is a welcome bonus in designing tall, full height linings.

The brick linings to vessels and ductwork are particularly appropriate where operating temperatures have reached acid dew point. They are well suited to the lower temperature and high humidity conditions experienced in gas scrubbers. To these properties should be added the benefits of thermal insulation and a high maximum allowable service temperature of 600°C which could arise during an air heater failure.

The superior chemical and mechanical properties of Accrington NORI chemical and abrasion resistant masonry have led to its successful utilisation in power stations and factories throughout the world.

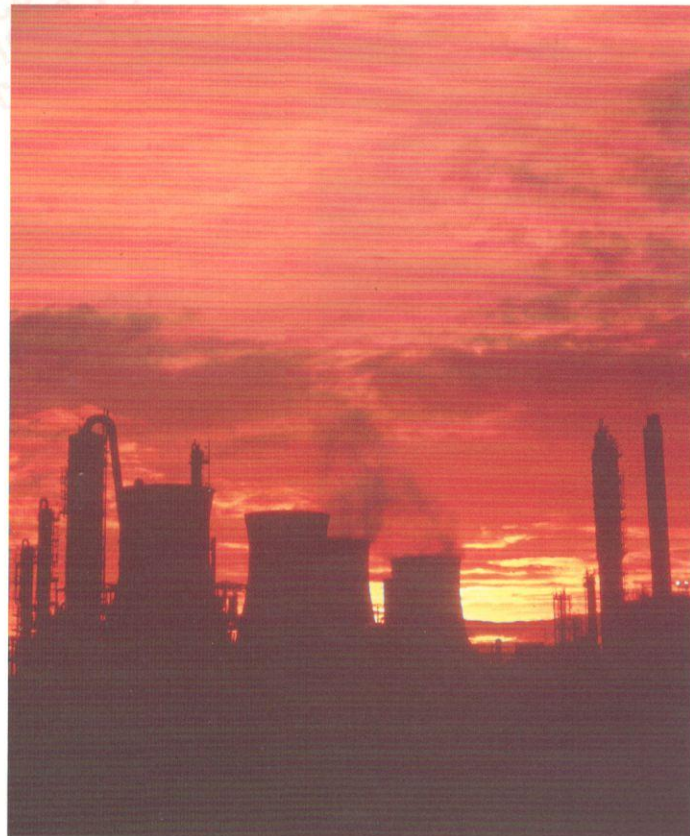


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Chimney and Flue Lining



Description

Accrington NORI chemical and abrasion resistant masonry embraces a range of bricks, pavers, tiles and complementary components which are resistant to chemical attack and able to withstand impact and attrition even at elevated temperatures.

Manufacture

Manufactured from silica alumina shale, which is crushed, ground, mixed, extruded, pressed or moulded, dried and finally fired in a tunnel kiln, or in kilns of an intermittent nature.

Quality

All Accrington NORI products are manufactured to quality assurance standards complying to ISO 9002 (BS5750 Part 2).

Product Range

Comprises a range of standard bricks, tapered bricks, circular and culvert bricks, flat and curved tiles (plain or tongue and grooved), industrial floor tiles and pavers, skirtings, channels, outlets, corbels and a variety of other special shapes.

Additionally purpose-made linings are designed and manufactured to order to suit particular applications and specific requirements.

The range of materials and sizes in regular use is shown on pages 18-26 of this catalogue.

Appearance

Dark red in colour with a smooth face. A dragwire finish is available on request. Pavers are supplied with a choice of smooth or anti-slip finish.

Technical Assistance

A free design and technical advice service conforming to ISO 9001 quality assurance criteria is offered from the Accrington offices. This service covers advice regarding the specification of membranes, mortars and ceramic materials along with preparation of detailed CAD drawings showing all aspects of brick construction.

Technical Information



Silica
Alumina
Ferric Oxide
Magnesia
Potash
Titania
Soda
Lime

Conformance

The red shale products of Accrington NORI chemical and abrasion resistant masonry have been tested to and found to conform with the following standards:

	BS Standards	ASTM Standards	DIN Standards
Bulk Density	BS 1902:3.8:1981 2.4g/cm ³	ASTM C20-83 2.4g/cm ³	DIN 51056:83 2.4g/cm ³
Apparent Porosity	BS 1902:3.8:1981 10.0%	ASTM C20-83 5.0%	DIN 51056:83 6.0%
Compressive Strength	ISO/TC 179:3:N12 150N/mm ²	ASTM C67-83 16,000 psi	DIN 51067:77 150N/mm ²
Water Absorption	BS 3921:1985 3.0%	ASTM C20-83 2.0%	DIN 51056:83 2.5%
Acid Solubility	ISO 8890 8.0%	ASTM C279-89 8.0%	DIN 51102:76 8.0%
Transverse Strength	BS 6677:1:1986 12 KN		
Thermal Conductivity	BS 1902:5.5:1991 1.75 W/m°C		DIN 52612:79 1.75 W/m°C
Abrasion Resistance	BS 6431:Part 14:1983 Typical cut volume 105mm ³		
Thermal Expansion Coefficient	BS 6431:Part 15:1983 Typically $6 \times 10^{-6}/^{\circ}\text{C}$		DIN 51068:80 $6 \times 10^{-6}/^{\circ}\text{C}$
Surface Hardness	Measured on MOHS Scale Typical 7		
Resistance to Thermal Shock			DIN 51068:80 From 300°C Typically 20 cycles
Durability	Unaffected by frost and freeze-thaw cycles		
Chemical Resistance	Fully resistant to an extensive range of inorganic corrosive chemicals. See pages 14 to 15 for guidance on use of NORI materials in chemical environments.		

BRICK CHEMICAL ANALYSIS

	Typical % by weight
SiO ₂	62.5
Al ₂ O ₃	18.0
Fe ₂ O ₃	7.0
MgO	1.8
K ₂ O	3.7
TiO ₂	1.0
Na ₂ O	1.1
CaO	0.4



Chemical Resistance Tables

The following tables indicate the resistance of Accrington NORI chemical and abrasion resistant masonry to a wide range of chemicals. The materials are resistant up to the temperatures indicated to the maximum concentration or saturation of the chemicals listed subject to their maximum stable temperature.

The data listed is the result of laboratory tests or independent research and is provided for guidance only in the use of Accrington NORI chemical and abrasion

resistant masonry. If in doubt, please contact our Advisory Services Department.

Codes to suitability for use:

- A Suitable for use in all applications.
- F Suitable for use in only flooring applications.
- NI No information available on suitability of use.

Environment	Concentration %	Temperature	
		20°C	100°C
Acetic acid, glacial	97	A	A
Acetic acid	50	A	A
Acetic acid	40	A	A
Acetic acid	10	A	A
Acetone	100	A	A
Aluminium chloride		A	A
Aluminium sulphate		A	A
Alums, all types		A	A
Ammonia gas, dry		A	A
Ammonia, aqueous	30	A	A
Ammonium carbonate	Saturated	A	A
Ammonium chloride	Saturated	A	A
Ammonium hydroxide	10	A	A
Ammonium metaphosphate	Saturated	A	A
Ammonium nitrate	Saturated	A	A
Ammonium persulphate	Saturated	A	A
Ammonium sulphate	Saturated	A	A
Ammonium sulphide	Saturated	A	A
Ammonium thiocyanate	Saturated	A	A
Amyl acetate	100	A	A
Amyl alcohol	100	A	A
Amyl chloride	100	A	A
Aniline	100	A	A
Antimony chloride		A	A
Aqua regia		A	NI
Aviation fuel (115/145 octane)	100	A	A
Barium carbonate	Saturated	A	A
Barium chloride	Saturated	A	A
Barium sulphate	Saturated	A	A
Barium sulphide	Saturated	A	A
Beer		A	A
Benzene	100	A	A
Benzoic acid		A	A
Benzyl alcohol		A	A
Boric acid		A	A
Brine	Saturated	A	A
Bromine liquid	100	A	NI
Bromine water		A	NI
Butyl acetate	100	A	A
Butyl alcohol	100	A	A
Calcium carbonate	Saturated	A	A
Calcium chlorate	Saturated	A	A
Calcium chloride	50	A	A
Calcium hypochlorite bleach	20	A	NI
Calcium nitrate		A	A
Calcium phosphate	50	A	A
Calcium sulphate		A	A
Calcium sulphite		A	A
Calcium disulphide	100	A	A

Environment	Concentration %	Temperature	
		20°C	100°C
Carbon tetrachloride	100	A	A
Chlorine gas	100	A	NI
Chlorine gas, wet		A	A
Chlorobenzene	100	A	A
Chloroform	100	A	A
Chromic acid	80	A	A
Chromic acid	50	A	A
Chromic acid	10	A	A
Citric acid	10	A	A
Copper chloride	Saturated	A	A
Copper cyanide	Saturated	A	A
Copper nitrate	Saturated	A	A
Copper sulphate	Saturated	A	A
Cuprous chloride	Saturated	A	A
Detergents	2	A	A
Dibutyl phthalate	100	A	A
Dichloroethylene	100	A	A
Ethyl acetate	100	A	A
Ethyl alcohol	96	A	A
Ethylene glycol		A	A
Ethanolamine	100	A	A
Ethyl ether	100	A	A
Ethyl chloride	100	A	A
Ethylene dichloride	100	A	A
Ferric chloride	Saturated	A	A
Ferric nitrate	Saturated	A	A
Ferric sulphate	Saturated	A	A
Ferrous chloride	Saturated	A	A
Ferrous sulphate	Saturated	A	A
Formaldehyde	40	A	A
Formic acid	100	A	A
Formic acid	10	A	A
Fruit juices		A	A
Furfural	100	A	A
Gasoline	100	A	A
Glucose	20	A	A
Glycerine	100	A	A
Hydrobromic acid	50	A	A
Hydrochloric acid	30	A	A
Hydrochloric acid	20	A	A
Hydrochloric acid	10	A	A
Hydrochloric acid	2	A	A
Hydrogen peroxide	10	A	A

All environments where aggressive chemicals are present must incorporate a suitable membrane for protection of the substrate whether a floor or a vessel.

Environment	Concentration %	Temperature	
		20°C	100°C
Hydrogen chloride gas, dry	100	A	A
Hydrogen sulphide		A	A
Isopropyl alcohol	100	A	A
Iso-octane	100	A	A
Ketones		A	A
Lactic acid	20	A	A
Lead acetate	Saturated	A	A
Magnesium carbonate	Saturated	A	A
Magnesium chloride	Saturated	A	A
Magnesium hydroxide	Saturated	A	NI
Magnesium nitrate	Saturated	A	A
Magnesium sulphate	Saturated	A	A
Magnesium sulphite	Saturated	A	A
Mercuric chloride	40	A	A
Mercuric cyanide	Saturated	A	A
Mercury	100	A	A
Mercurous nitrate	Saturated	A	A
Methyl ethyl ketone	100	A	A
Methyl alcohol	100	A	A
Methylene chloride	100	A	A
Milk and its products		A	A
Mineral oil	100	A	A
Naphthalene	100	A	A
Nickel chloride	Saturated	A	A
Nickel nitrate	Saturated	A	A
Nickel sulphate	Saturated	A	A
Nitric acid	Fuming	A	NI
Nitric acid	70	A	A
Nitric acid	60	A	A
Nitric acid	10	A	A
Nitrobenzene	100	A	A
Oleic acid		A	A
Oleum		A	A
Oxalic acid, aqueous	50	A	A
Paraffin	100	A	A
Petrol	100	A	A
Phenol	100	A	A
Plating solutions Cadmium		F	F
Plating solutions Chromium		F	F
Plating solutions Copper		A	A
Plating solutions Gold		A	A
Plating solutions Lead		F	F
Plating solutions Nickel		A	A
Plating solutions Silver		A	A
Plating solutions Tin		F	F
Plating solutions Zinc		F	F
Potassium bicarbonate	Saturated	A	A
Potassium borate	1	A	A
Potassium bromate	10	A	A
Potassium bromide	Saturated	A	A
Potassium carbonate	Saturated	A	A
Potassium chlorate	Saturated	A	A
Potassium chloride	Saturated	A	A
Potassium chromate	40	A	A
Potassium cyanide	Saturated	A	A
Potassium dichromate	40	A	A
Potassium nitrate	Saturated	A	A

Environment	Concentration %	Temperature	
		20°C	100°C
Potassium perborate	Saturated	A	A
Potassium perchlorate	10	A	A
Potassium permanganate	20	A	A
Potassium sulphate		A	A
Potassium sulphide		A	A
Potassium sulphite		A	A
Propyl alcohol	100	A	A
Pyridine	100	A	A
Silicone oil	100	A	A
Sodium acetate		A	A
Sodium bicarbonate	Saturated	A	A
Sodium bisulphate	Saturated	A	A
Sodium bisulphite	Saturated	A	A
Sodium borate		A	A
Sodium carbonate	Saturated	A	A
Sodium chlorate	Saturated	A	A
Sodium chloride	Saturated	A	A
Sodium chlorite	2	A	A
Sodium chlorite	5	A	A
Sodium chlorite	10	A	A
Sodium chlorite	20	A	A
Sodium cyanide	Saturated	A	A
Sodium dichromate	Saturated	A	A
Sodium ferricyanide	Saturated	A	A
Sodium ferrocyanide	Saturated	A	A
Sodium hypochlorite	20	A	NI
Sodium nitrate		A	A
Sodium nitrite		A	A
Sodium silicate		A	A
Sodium sulphate	Saturated	A	A
Sodium sulphide	25	A	A
Sodium sulphite	Saturated	A	A
Stannous chloride	Saturated	A	A
Stannic chloride	Saturated	A	A
Sulphur		A	A
Sulphuric acid	98	A	A
Sulphuric acid	60	A	A
Sulphuric acid	50	A	A
Sulphuric acid	10	A	A
Sugars and syrups		A	A
Sulphamic acid		A	A
Tannic acid	10	A	A
Tartaric acid		A	A
Tetrahydrofuran	100	A	A
Toluene	100	A	A
Trichloacetic acid	10	A	A
Trichloroethylene	100	A	A
Triethanolamine	100	A	A
Turpentine	100	A	A
Urea		A	A
Urine		A	A
Water, distilled, soft, hard and vapour		A	A
Whisky		A	A
White spirit	100	A	A
Wines		A	A
Xylene	100	A	A
Zinc chloride	Saturated	A	A
Zinc oxide		A	A
Zinc sulphate	Saturated	A	A



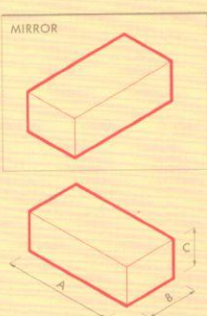
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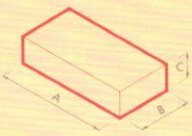
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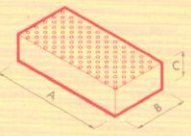
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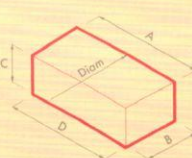
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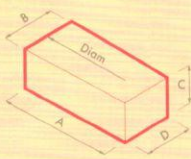
Special Shapes: Dimensions

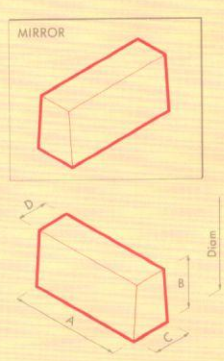
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		TYPE No.	A	B	C
ST STANDARD BRICK		ST.1	220	105	75

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS			
		TYPE No.	A	B	C
PV. 1 PLAIN PAVER		PV.1.1	220	105	40
		PV.1.2	220	105	50
		PV.1.3	220	105	75

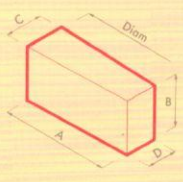
TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS			
		TYPE No.	A	B	C
AS. 1 ANTI-SLIP PAVER		AS.1.1	220	105	40
		AS.1.2	220	105	50
		AS.1.3	220	105	75

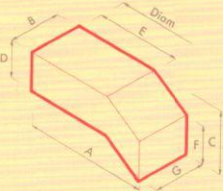
TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS					
		TYPE No.	A	B	C	D	Diam
RA. 1 RADIAL STRETCHER		RA.1.1	220	105	75	216	11000
		RA.1.2	220	105	75	214	8000
		RA.1.3	220	105	75	212	6000
		RA.1.4	220	105	75	210	5000
		RA.1.5	220	105	75	207	3500
		RA.1.6	220	105	75	204	3000
		RA.1.7	220	105	75	201	2500
		RA.1.8	220	105	75	197	2000

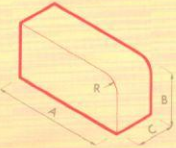
TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS					
		TYPE No.	A	B	C	D	Diam
RA. 2 RADIAL HEADER		RA.2.1	220	105	75	101	11000
		RA.2.2	220	105	75	99	8000
		RA.2.3	220	105	75	97	6000
		RA.2.4	220	105	75	95	5000
		RA.2.5	220	105	75	92	3500
		RA.2.6	220	105	75	89	3000
		RA.2.7	220	105	75	86	2500
		RA.2.8	220	105	75	81	2000

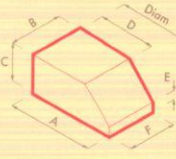
TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS					
		TYPE No.	A	B	C	D	Diam
RA. 3 RADIAL SIDE ARCH		RA.3.1	220	105	75	25	325
		RA.3.2	220	105	75	50	65
		RA.3.3	220	105	75	60	109
		RA.3.4	220	105	75	70	3275

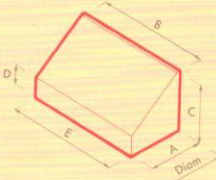
Special Shapes: Dimensions

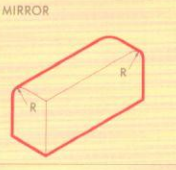
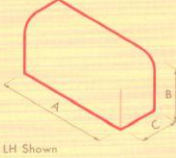
TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS					
		TYPE No.	A	B	C	D	Diam
RA. 4 RADIAL END ARCH		RA4.1	220	105	75	20	625
		RA4.2	220	105	75	45	1150
		RA4.3	220	105	75	55	1715
		RA4.4	220	105	75	65	3450

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS								
		TYPE No.	A	B	C	D	E	F	G	Diam
CO. 2 CORBEL DRIP		CO.2.0	245	105	125	75	170	75	105	—
		CO.2.1	245	105	125	75	170	75	100	11000
		CO.2.2	245	105	125	75	170	75	98	8000
		CO.2.3	245	105	125	75	170	75	96	6000
		CO.2.4	245	105	125	75	170	75	94	5000
		CO.2.5	245	105	125	75	170	75	90	3500
		CO.2.6	245	105	125	75	170	75	87	3000
		CO.2.7	245	105	125	75	170	75	84	2500
		CO.2.8	245	105	125	75	170	75	79	2000

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS				
		TYPE No.	A	B	C	R
BU. 1 SINGLE BULLNOSE HEADER ON EDGE		BU.1	220	105	75	30

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS							
		TYPE No.	A	B	C	D	E	F	Diam
CO. 1 CORBEL PLINTH HEADER		CO.1.0	170	105	75	115	20	105	—
		CO.1.1	170	105	75	115	20	102	11000
		CO.1.2	170	105	75	115	20	100	8000
		CO.1.3	170	105	75	115	20	99	6000
		CO.1.4	170	105	75	115	20	97	5000
		CO.1.5	170	105	75	115	20	95	3500
		CO.1.6	170	105	75	115	20	93	3000
		CO.1.7	170	105	75	115	20	90	2500
		CO.1.8	170	105	75	115	20	87	2000

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS						
		TYPE No.	A	B	C	D	E	Diam
CO. 3 CORBEL CHAMFER		CO.3.0	105	220	115	40	220	—
		CO.3.1	105	220	115	40	216	11000
		CO.3.2	105	220	115	40	214	8000
		CO.3.3	105	220	115	40	212	6000
		CO.3.4	105	220	115	40	210	5000
		CO.3.5	105	220	115	40	207	3500
		CO.3.6	105	220	115	40	204	3000
		CO.3.7	105	220	115	40	201	2500
		CO.3.8	105	220	115	40	197	2000

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS				
		TYPE No.	A	B	C	R
BU. 2 EXT. RETURN TO SINGLE BULLNOSE HEADER ON EDGE SQUARE ON BED (LEFT/RIGHT)	MIRROR 	BU.2.1L	220	105	75	30
		BU.2.1R	220	105	75	30
	LH Shown	BU.2.2	220	105	220	30

Special Shapes: Dimensions

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS				
		TYPE No.	A	B	C	R
BU. 3 EXT. RETURN TO SINGLE BULLNOSE HEADER ON EDGE ROUNDED ON BED (LEFT/RIGHT)		BU.3.1L	220	105	75	30
		BU.3.1R	220	105	75	30
		BU.3.2	220	105	220	30

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS				
		TYPE No.	A	B	C	R
BU.4 INT. RETURN TO SINGLE BULLNOSE HEADER ON EDGE		BU. 4	220	220	105	30

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS				
		TYPE No.	A	B	C	R
BU. 5 DOUBLE BULLNOSE HEADER ON EDGE		BU.5	220	105	75	30

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS				
		TYPE No.	A	B	C	R
BU. 6 STOP END TO DOUBLE BULLNOSE HEADER ON EDGE		BU.6	220	220	105	30

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS				
		TYPE No.	A	B	C	R
BU. 7 EXT./INT. RETURN TO DOUBLE BULLNOSE HEADER ON EDGE		BU.7	220	220	105	30

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS				
		TYPE No.	A	B	C	R
BU. 8 SINGLE BULLNOSE HEADER ON FLAT OR ON END		BU.8.1	220	105	50	30
		BU.8.2	220	105	75	30

Special Shapes: Dimensions

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS				
		TYPE No.	A	B	C	R
BU. 9 SINGLE BULLNOSE STRETCHER ON FLAT		BU.9.1	220	105	50	30
		BU.9.2	220	105	75	30

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS				
		TYPE No.	A	B	C	R
BU. 10 EXT. RETURN TO SINGLE BULLNOSE ON FLAT OR ON END ROUNDED ON BED (LEFT/RIGHT)		BU.10.1L	220	105	50	30
		BU.10.1R	220	105	50	30
		BU.10.2L	220	105	75	30
		BU.10.2R	220	105	75	30
		BU.10.3	220	220	50	30
BU.10.4	220	220	75	30		

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS				
		TYPE No.	A	B	C	R
BU. 11 INT. RETURN TO SINGLE BULLNOSE ON FLAT SQUARE ON BED (LEFT/RIGHT)		BU.11.1L	220	105	50	30
		BU.11.1R	220	105	50	30
		BU.11.2L	220	105	75	30
		BU.11.2R	220	105	75	30
		BU.11.3	220	220	50	30
		BU.11.4	220	220	75	30

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS				
		TYPE No.	A	B	C	R
BU. 12 INT. RETURN TO SINGLE BULLNOSE HEADER ON FLAT (LEFT/RIGHT)		BU.12.1L	220	105	50	30
		BU.12.1R	220	105	50	30
		BU.12.2L	220	105	75	30
		BU.12.2R	220	105	75	30
		BU.12.3	220	220	50	30
		BU.12.4	220	220	75	30

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS				
		TYPE No.	A	B	C	R
BU. 13 INT. RETURN TO SINGLE BULLNOSE HEADER ON END (LEFT/RIGHT)		BU.13L	220	105	50	30
		BU.13R	220	105	50	30

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS				
		TYPE No.	A	B	C	R
BU. 14 DOUBLE BULLNOSE HEADER ON FLAT		BU.14.1	220	105	50	30
		BU.14.2	220	105	75	30

Special Shapes: Dimensions

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS				
		TYPE No.	A	B	C	R
BU. 15 STOP END TO DOUBLE BULLNOSE HEADER ON FLAT		BU. 15.1	220	105	50	30
		BU. 15.2	220	105	75	30

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS				
		TYPE No.	A	B	C	R
BU. 16 EXT./INT. RETURN TO DOUBLE BULLNOSE HEADER ON FLAT SQUARE ON BED		BU. 16.1	220	220	50	30
		BU. 16.2	220	220	75	30

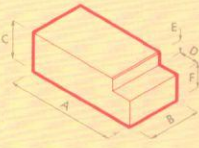
TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS				
		TYPE No.	A	B	C	R
BU. 17 EXT./INT. RETURN TO DOUBLE BULLNOSE HEADER ON FLAT ROUNDED ON BED		BU. 17.1	220	220	50	30
		BU. 17.2	220	220	75	30

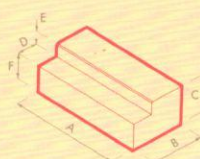
TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS				
		TYPE No.	A	B	C	R
BU. 18 DOUBLE BULLNOSE STRETCHER ON FLAT		BU. 18.1	220	105	50	30
		BU. 18.2	220	105	75	30

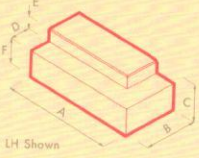
TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS				
		TYPE No.	A	B	C	R
BU. 19 STOP END TO DOUBLE BULLNOSE STRETCHER ON FLAT		BU. 19.1	220	105	50	30
		BU. 19.2	220	105	75	30

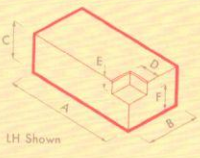
TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS				
		TYPE No.	A	B	C	R
BU. 20 EXT./INT. RETURN TO DOUBLE BULLNOSE STRETCHER ON FLAT (LEFT/RIGHT)		BU. 20.1L	220	105	50	30
		BU. 20.1R	220	105	50	30
		BU. 20.2L	220	105	75	30
		BU. 20.2R	220	105	75	30

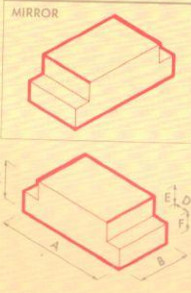
Special Shapes: Dimensions

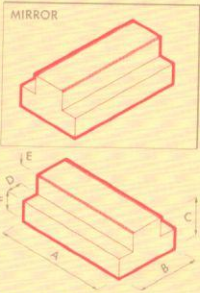
TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS						
		TYPE No.	A	B	C	D	E	F
RE. 1 REBATED HEADER		RE.1.1	220	105	50	40	25	25
		RE.1.2	220	105	75	40	25	50

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS						
		TYPE No.	A	B	C	D	E	F
RE. 2 REBATED STRETCHER		RE.2.1	220	105	50	40	25	25
		RE.2.2	220	105	75	40	25	50

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS						
		TYPE No.	A	B	C	D	E	F
RE. 3 INT. RETURN TO REBATE (LEFT/RIGHT)		RE.3.1L	220	105	50	40	25	25
		RE.3.1R	220	105	50	40	25	25
		RE.3.2L	220	105	75	40	25	50
		RE.3.2R	220	105	75	40	25	50

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS						
		TYPE No.	A	B	C	D	E	F
RE. 4 INT. RETURN TO REBATE (LEFT/RIGHT)		RE.4.1L	220	105	50	40	25	25
		RE.4.1R	220	105	50	40	25	25
		RE.4.2L	220	105	75	40	25	50
		RE.4.2R	220	105	75	40	25	50

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS						
		TYPE No.	A	B	C	D	E	F
RE. 5 DOUBLE REBATED HEADER		RE.5.1	220	105	50	40	25	25
		RE.5.2	220	105	75	40	25	50

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS						
		TYPE No.	A	B	C	D	E	F
RE. 6 DOUBLE REBATED STRETCHER		RE.6.1	220	125	50	40	25	25
		RE.6.2	220	125	75	40	25	50

Special Shapes: Dimensions

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS						
		TYPE No.	A	B	C	D	E	F
RE. 7 EXT./INT. RETURN TO REBATED HEADER		RE. 7.1	220	220	50	40	25	25
		RE. 7.2	220	220	75	40	25	50

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS						
		TYPE No.	A	B	C	D	E	F
RE. 8 EXT./INT. RETURN TO REBATED STRETCHER (LEFT/RIGHT)		RE. 8.1L	220	125	50	40	25	25
		RE. 8.1R	220	125	50	40	25	25
		RE. 8.2L	220	125	75	40	25	50
		RE. 8.2R	220	125	75	40	25	50

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS						
		TYPE No.	A	B	C	D	E	R
SK. 1 SQUARE TOP COVERED SKIRTING		SK. 1.1	125	85	205	45	40	30
		SK. 1.2	125	85	205	45	50	30
		SK. 1.3	125	85	205	45	75	30

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS							
		TYPE No.	A	B	C	D	E	R	R1
SK. 2 STOP END TO SQUARE TOP COVERED SKIRTING (LEFT/RIGHT)		SK. 2.1L	125	85	205	45	40	30	25
		SK. 2.1R	125	85	205	45	40	30	25
		SK. 2.2L	125	85	205	45	50	30	25
		SK. 2.2R	125	85	205	45	50	30	25
		SK. 2.3L	125	85	205	45	75	30	25
		SK. 2.3R	125	85	205	45	75	30	25

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS							
		TYPE No.	A	B	C	D	E	R	R1
SK. 3 EXT. RETURN TO SQUARE TOP COVERED SKIRTING ROUND ON VERTICAL		SK. 3.1	110	110	205	45	40	30	25
		SK. 3.2	110	110	205	45	50	30	25
		SK. 3.3	110	110	205	45	75	30	25

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS							
		TYPE No.	A	B	C	D	E	R	R1
SK. 4 INT. RETURN TO SQUARE TOP COVERED SKIRTING ROUND ON VERTICAL		SK. 4.1	85	85	205	45	40	30	25
		SK. 4.2	85	85	205	45	50	30	25
		SK. 4.3	85	85	205	45	75	30	25

Special Shapes: Dimensions

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS							
		TYPE No.	A	B	C	D	E	R	R1
SK. 5 BULLNOSE TOP COVERED SKIRTING		SK. 5.1	125	85	205	45	40	30	25
		SK. 5.2	125	85	205	45	50	30	25
		SK. 5.3	125	85	205	45	75	30	25

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS							
		TYPE No.	A	B	C	D	E	R	R1
SK. 6 STOP END TO BULLNOSE TOP COVERED SKIRTING (LEFT/RIGHT)		SK. 6.1L	125	85	205	45	40	30	25
		SK. 6.1R	125	85	205	45	40	30	25
		SK. 6.2L	125	85	205	45	50	30	25
		SK. 6.2R	125	85	205	45	50	30	25
		SK. 6.3L	125	85	205	45	75	30	25
		SK. 6.3R	125	85	205	45	75	30	25

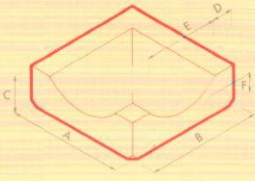
TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS							
		TYPE No.	A	B	C	D	E	R	R1
SK. 7 INT. RETURN TO BULLNOSE TOP COVERED SKIRTING ROUND ON VERTICAL		SK. 7.1	110	110	205	45	40	30	25
		SK. 7.2	110	110	205	45	50	30	25
		SK. 7.3	110	110	205	45	75	30	25

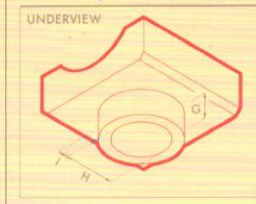
TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS							
		TYPE No.	A	B	C	D	E	R	R1
SK. 8 INT. RETURN TO BULLNOSE TOP COVERED SKIRTING ROUND ON VERTICAL		SK. 8.1	85	85	205	45	40	30	25
		SK. 8.2	85	85	205	45	50	30	25
		SK. 8.3	85	85	205	45	75	30	25

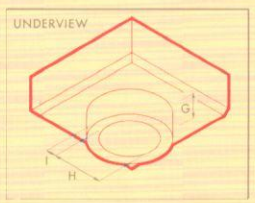
TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS						
		TYPE No.	A	B	C	D	E	F
CH. 1 SHALLOW CHANNEL		CH. 1.1	125	200	50	50	100	25
		CH. 1.2	125	250	75	50	150	40
		CH. 1.3	125	300	75	50	200	40
		CH. 1.4	125	350	75	50	250	40

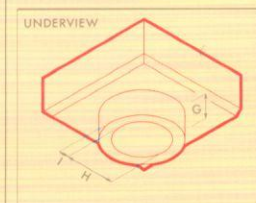
TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS						
		TYPE No.	A	B	C	D	E	F
CH. 2 STOP END TO SHALLOW CHANNEL		CH. 2.1	125	200	50	50	100	25
		CH. 2.2	125	250	75	50	150	40
		CH. 2.3	125	300	75	50	200	40
		CH. 2.4	125	350	75	50	250	40

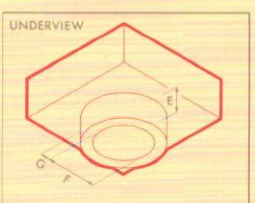
Special Shapes: Dimensions

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS						
		TYPE No.	A	B	C	D	E	F
CH. 3 EXT./INT. RETURN TO SHALLOW CHANNEL		CH.3.1	200	200	50	50	100	25
		CH.3.2	250	250	75	50	150	40
		CH.3.3	300	300	75	50	200	40
		CH.3.4	350	350	75	50	250	40

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS									
		TYPE No.	A	B	C	D	E	F	G	H	I
CH. 4 RUNNING SPIGOT OUTLET TO SHALLOW CHANNEL		CH.4.1	220	200	50	50	100	25	50	100	20
		CH.4.2	220	250	75	50	150	40	50	100	20
		CH.4.3	220	300	75	50	200	40	50	100	20
		CH.4.4	220	350	75	50	250	40	50	100	20

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS									
		TYPE No.	A	B	C	D	E	F	G	H	I
CH. 5 STOP END SPIGOT OUTLET TO SHALLOW CHANNEL		CH.5.1	220	200	50	50	100	25	50	100	20
		CH.5.2	220	250	75	50	150	40	50	100	20
		CH.5.3	220	300	75	50	200	40	50	100	20
		CH.5.4	220	350	75	50	250	40	50	100	20

TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS									
		TYPE No.	A	B	C	D	E	F	G	H	I
CH. 6 EXT./INT. RETURN SPIGOT OUTLET TO SHALLOW CHANNEL		CH.6.1	200	200	50	50	100	25	50	100	20
		CH.6.2	250	250	75	50	150	40	50	100	20
		CH.6.3	300	300	75	50	200	40	50	100	20
		CH.6.4	350	350	75	50	250	40	50	100	20

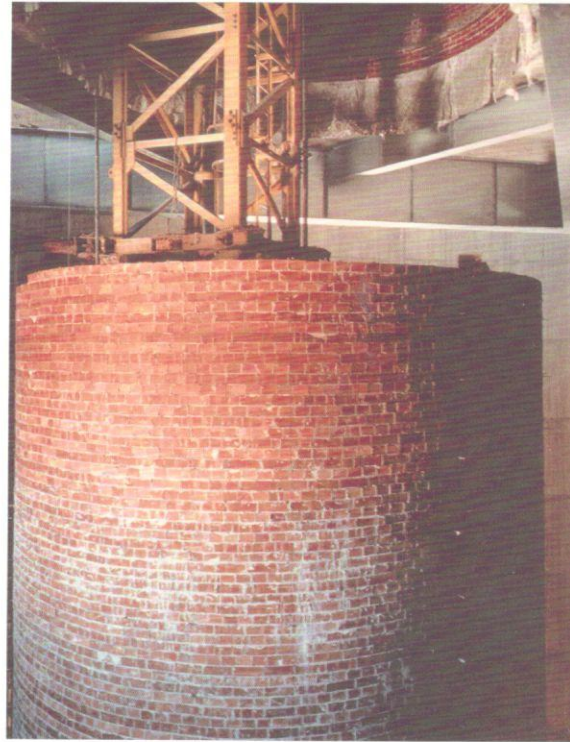
TYPE AND DESCRIPTION	DIAGRAM	DIMENSIONS							
		TYPE No.	A	B	C	D	E	F	G
DR. 1 DRAINAGE BLOCK		DR.1.1	220	220	75	25	50	80	20
		DR.1.2	220	220	75	25	50	100	20

Completed Projects

From Algeria to Zaire, Australia to Zambia, NORI specialist ceramics have been shipped to many worldwide locations. In sectors of the process industry as diverse as fertilisers and films, paper and pharmaceuticals, Accrington NORI products have been specified by process engineers with complete confidence.

Although in compiling this section of the brochure we have concentrated on our international markets and referred only to specific projects completed since 1970, the information given is far from exhaustive. Many floors, vessels and linings completed fifty and more years ago are still giving the same resistance to corrosive and abrasive attack as the day they were installed.

A proud testimony to a superb range of products.



International Projects

Contractor or Purchasing Agent	Project	Date Despatched	Site	Country
A S Watson	Power station floors	Jun 79	Castle Peak	Hong Kong
Acalor	Dairy floors	May 85	Pine Hill	Barbados
Acalor	Vessel linings for NPC	Jan 91	Abadan	Iran
Adolf Plinke & Sohne	Submerged combustor linings	Jun 82		West Germany
Al Meroogue Dairy	Dairy floors	Jan 86	West Riffa	Saudi Arabia
Ancorite	Flooring	Jul 90	Bangkok	Thailand
Ancorite	Fertilizer plant vessel linings	Oct 89	Alkaim	Iraq
Ancorite	Absorber tower linings	May 88	Onsan	Korea
Ancorite	Digester vessel linings	Feb 88	Paisur Gudang	Malaysia
Ancorite	Reactor vessel linings	Feb 87	Le Havre	France
Ancorite	Propellant plant linings	Jan 87	Nakorn Sawan	Thailand
Ancorite	Drying and absorber tower linings, floors and bunds	Oct 86	Kristiansand	Norway
Ancorite	Sulphur pit linings	Mar 80	Naples	Italy
Ancorite	Fertilizer plant floors	Jan 80	Alkaim	Iraq
Ancorite	Scrubber and entrainment separator tower and circulation tank linings	Aug 79	Katina	Yugoslavia
Ancorite	Copper smelter tower, seal pot and circulation tank linings	Dec 77	Onsan	South Korea
Ancorite on behalf of Fluor	Vessel linings for ADNDC	May 82		United Arab Emirates
Ancorite	Vessel lining titanium dioxide plant	Aug 91	Telok Kelong	Malaysia
Ancorite	Flooring for Glaxochem	May 92	Singapore	Singapore
Ancorite	Sulphur pit lining for Esso	Jul 92	Bangkok	Thailand
Ancorite	Flooring and vessel lining	Jul 91	Baracaldo	Spain
Anderson	Vessel linings for acid plant	Apr 92	Bandar Khomeini	Iran
ARTS	Food factory flooring	Jan 91		Eire
ARTS	Food factory flooring	Apr 91		Eire
ARTS	Flooring	Jun 91		Eire
ARTS	Flooring	Aug 91		Eire
ARTS	Flooring	Oct 91		Eire
B V Gouda	Vessel dome linings	Jun 76	Rotterdam	Holland
Babcock Corrosion Control	Power station water treatment plant linings	Oct 80	Castle Peak	Hong Kong
Babcock Woodall-Duckham	Oxidiser discharge slurry tank	Mar 88	Bunbury	Australia
Babcock Woodall-Duckham	Cyclone solids sluice tank linings	Mar 88	Bunbury	Australia
Bechtel (Merke Sharpe & Dohme)	Pharmaceutical factory floors	Jul 85	Dublin	Eire
Beechams Products	Bottling plant floors for Beechams Lucozade and Ribena	Apr 81	Hong Kong	Hong Kong
Beechams Products	Bottling plant floors for Beechams Lucozade and Ribena	Apr 81	Lagos	Nigeria
Beugin	Flooring	Feb 88	Houdain	France
Bierrum on behalf of ESB	Power station chimney linings	Jun 78	Cork	Eire
Bierrum on behalf of ESB	Power station chimney linings	Mar 76	Dublin	Eire
Cape East	Prill tower base	Feb 92	Abadan	Iran
Chartered Consolidated Services	Copper mine slabs	Aug 78		Zambia
Chemical Construction	Drying and absorber tower and stripping column linings	Apr 71	Ghazouet	Algeria
Chemical Engineering	Absorber tower linings	Feb 87	Lahore	Pakistan
China Light & Power	Power station chimney linings	Jul 89	Tsing Yi	Hong Kong
China Light & Power	Power station chimney linings	Sep 86	Tsing Yi	Hong Kong
Crown Agents	Desalter plant chimney corbels and splays	Jun 78	Hong Kong	Hong Kong
Daelim Industrial	Power station water treatment plant floors and linings	Aug 82	Doha	Qatar
Daelim Industrial	Power station water treatment plant floors and linings	Dec 78	Doha	Qatar
D D O'Brien	Flooring for pharmaceutical factory	Jun 91	Dunderow	Eire
Dunlop-Nordac	Reactor holding tank linings	Oct 73		Poland
Embassy procurement	Ordinance factory floors	Jul 79	Karachi	Pakistan
ESB	Power station chimney linings		Aghada	Eire
ESB	Power station chimney linings		Ferbane	Eire
ESB	Power station chimney linings		Great Island	Eire
ESB	Power station chimney linings		Pigeon House	Eire
ESB	Power station chimney linings		Ringsend	Eire
ESB	Power station chimney linings		Shannonbridge	Eire
ESB	Power station chimney linings	Apr 92	Tullamore	Eire

International Projects

Contractor or Purchasing Agent	Project	Date Despatched	Site	Country
FPS Mid East	Effluent pit linings	Oct 91		Abu Dhabi
Gammon (Hong Kong)	Power station chimney linings	Jul 84	Lamma Island	Hong Kong
Gammon (India)	Power station chimney linings	Dec 77	Tripoli	Libya
Greenbank Engineering	Alum plant vessel linings and floors	Aug 85	Lagos	Nigeria
Guthrie	Power station chimney linings	Jan 78	Singapore	Singapore
Hanson & Yuncken	Hospital kitchen floors	Feb 76	Goulburn Valley	Australia
Hydraulic Machineries	Hydraulic machinery factory floors	Apr 79	Manila	Philippines
Hyundai International	Fertilizer plant floors, bund walls and tank linings	May 79	Damman	Saudi Arabia
ICI	Stripping column linings	Oct 80	Calcutta	India
ICI	Stripping column linings	Nov 78	Gomia	India
Iranian Oil Services (renamed Kala)	Circulation tank linings	Jun 79	Abadan	Iran
James Clover Steeplejacks	Power station chimneys	Feb 90	Khartoum	Sudan
Kala	Circulation tank linings	Nov 82	Tehran	Iran
Kala Ltd	Vessel linings	Mar 91	Tehran	Iran
Kala Naft Co	Acid circulation tanks	Oct 89	Tehran	Iran
Kel Chemicals	Floors	Dec 80	Nairobi	Kenya
King, Traudevin & Gregson	High level tank and vessel linings	Jun 76	Petro	Peru
Kumagai Gumi	Power station ash bunker linings	Aug 83	Castle Peak	Hong Kong
Laporte (Malaysia)	Digester vessel linings	May 88	Pasir Gudang	Malaysia
Lucky Metals	Sulphuric acid plant tower lining	Dec 92	Onsan	Korea
Lysaght	Scale flume linings	Jun 76	Victoria	Australia
Mathew Hall/Paytner	Sulphonation plant linings	Jan 78	Victoria	Australia
Minerals & Refractories	Sulphur pit lining	Mar 91	Haifa	Israel
Metz	Spray towers	Dec 90	Burnie	Australia
Metz	Absorber and drying towers	Oct 90	Newcastle	Australia
Metz	Drying tower and acid circulation tanks	Sep 90	Risdon	Australia
Metz	Chimney linings	Sep 90	Singapore	Singapore
Metz	Chemical spillage pits	Jun 90	Framantle	Australia
Metz	Chimney linings	May 90	Port Kembla	Australia
Metz	Flooring	Mar 90	Mulwala	Australia
Metz	Electrolytic zinc neutralisation oxidation tank linings	Nov 89	Hobart	Australia
Metz	Flooring	Jul 89	Burnie	Australia
Metz	Nitric acid tank farm	Mar 89	Mulwala	Australia
Metz	Electrolytic zinc jarosite filtration plant linings	Feb 89	Hobart	Australia
Metz	Mist eliminator linings	Apr 85	Newcastle	Australia
Metz	Vessel linings	Nov 84	Hobart	Australia
Metz	Weak acid tank linings	Mar 82	Port Kembla	Australia
Metz	Fertilizer plant vessel linings	Jul 81	Pinkenba	Australia
Metz	Vessel linings	Nov 80	Burnie	Australia
Metz	Cooling tower linings	Nov 78	Burnie	Australia
Metz	Acid tank linings	Jan 78	Victoria	Australia
Metz	Electrolytic zinc plant linings	Jun 76	Hobart	Australia
Metz	Averaging pit linings	Mar 73	Garden Island	Australia
Metz	Pickling line linings	Feb 72	Victoria	Australia
Metz	Galvanizing pit and acid tank linings	Dec 71	Victoria	Australia
Metz	Neutralising pit linings	Dec 71	Victoria	Australia
Metz	Vessel linings	Jan 71	Victoria	Australia
Nord Anti-Corrosion	Flooring	Aug 89	Calais	France
Ooms Pittner	Chimney linings	Jun 80	Hong Kong	Hong Kong
Oy-Waisila Hognas	Floors and bund areas	Jun 80	Harjavalta	Finland
Paynter & Dixon	Bottling plant floors for Cadbury Schweppes	Oct 73	Tullamarine	Australia
Picfare	Effluent pit lining	Sep 91	Lagos	Nigeria
Pitma	Digester vessel linings	Jan 86	Barcelona	Spain

International Projects

Contractor or Purchasing Agent	Project	Date Despatched	Site	Country
POF	Vessel linings	Dec 92	Wah Cantt	Pakistan
Prodorite	Flooring	Jul 88	Safco/Damman	Saudi Arabia
Prodorite	Airport area floors	Sep 80	Shannon	Eire
Prodorite	Flooring to fertiliser factory	Jan 91	Yanbu	Saudi Arabia
R M Parson	Sulphur pit linings	Mar 76	Khomeini Port	Iran
SCM Australia	Cyclone solid sluice tanks	Jul 89	Bunbury	Australia
Sen Tech Int	Chimney linings	Mar 89	Kuala Lumpur	Malaysia
Simon Carves	Dry and absorber tower linings	Jan 90	Smiadovo	Bulgaria
Simon Carves	Drying absorber tower linings	Aug 89	Kwaadmechelen	Belgium
Simon Carves	Vessel linings	Jul 89	Karachi	Pakistan
Simon Carves	Acid circulation tank linings	Mar 89	Bayswater	New Zealand
Simon Carves	Absorber tower linings	Dec 83	Auckland	New Zealand
Simon Carves	Fertilizer plant vessel linings	Mar 80	Pinkenba	Australia
Simon Carves	Drying and absorber tower and circulation tank linings	Jun 79	Khomeini Port	Iran
Simon Carves	Drying and absorber tower linings	Jan 75	Kwihana	New Zealand
Simon Carves	Drying and absorber tower and circulation tank linings	Apr 74	Khomeini Port	Iran
Simon Carves	Drying, humidifier and absorber tower and stripping column linings	Apr 72	Ergeli	Turkey
Simon Carves (Aus)	Dry tower linings	Dec 89	Awarua	New Zealand
Simon Carves (Aus)	Dry and absorber tower and acid tank linings	Dec 89	Port Kembla	Australia
Simon Carves (Aus)	Sulphuric acid plant vessel lining	May 91	Southlands	New Zealand
Simon Carves	Drying tower linings	Dec 86	Gecamines	Zaire
Simon Carves	Cooler elements	May 86	Karachi	Pakistan
Simon Carves	Drying and absorber tower and acid tank linings	Oct 83	Gecamines	Zaire
Simon Carves	Fertilizer plant vessel linings	Jul 80	Mount Maunganui	New Zealand
Simon Carves	Refinery vessel linings	Nov 79	Masafi Daura	Iraq
Simon Carves	Sulphur smelter and circulation and settling tank linings	Nov 78	Dhahran	Saudi Arabia
Simon Carves	Condenser tower linings and cooler elements	Dec 76	Karachi	Pakistan
Simon Carves	Drying, interpass and final absorber tower linings	Jul 75	Morrinsville	New Zealand
Simon Carves	Drying and absorber tower linings	Feb 75	Dominion	New Zealand
Sirycon	Scrubber and entrainment separator tower and circulation tank linings	Nov 77	Baric	Yugoslavia
Southern Mosaic	Floors	Jun 85	Dublin	Eire
Steeplejack International	Chimney linings	Nov 89	Antwerp	Belgium
Thiess Cont	Power station chimney linings	Aug 90	Mount Piper	Australia
Thiess Cont	Power station chimney linings	Aug 90	Stanwell	Australia
Tileman	Chimney linings	Feb 90	Trinidad	Trinidad & Tobago
Tileman	Power station chimney linings	Nov 85	Al Mussaib	Iraq
Tileman	Power station chimney linings	Sep 73	Port Dickson	Malaysia
Tileman	Refinery linings for Esso	Jul 72	Singapore	Singapore
Tileman	Power station chimney linings	Dec 70	Lagos	Nigeria
Tileman (SE) Ltd	Flooring	Dec 90	Delimira	Malta
Timcor	Acid reconcentrator lining	Aug 91	Marseilles	France
Timcor	Gas scrubber lining	Jun 91	Lyon	France
Tioxide	Efflorescence pits	Nov 88	Calais	France
Tioxide UK	Calciner	Nov 89	Tracy	Canada
TIRCO	Sulphur pit	Oct 92	Rayong	Thailand
TIRCO	Flooring and effluent pits	May 92	Kaohsiung	Taiwan
TIRCO	Petrochem flooring and effluent pits	Jan 90	Taipei	Taiwan
Trebor Sharpes	Sweet factory floors for Trebor Sharpes	Apr 70	Lagos	Nigeria
Von Bree	Drying and absorber tower linings	Jan 78	Michilla	Chile
Willich	Vessel linings	Feb 90	Tehran	Iran
Wilma Bouwondenning West	Floors	Sep 85	Rotterdam	Holland
Wilson Supply (Int) Ltd	Sulphur pit linings	Aug 90	Damman	Saudi Arabia
Wilson Supply	Vessel lining for SAFCO	May 92	Jubail	Saudi Arabia
Zublin	Power station water treatment plant floors and linings	Oct 75	Doha	Qatar

UK Projects

Our involvement in domestic markets is extensive. Projects have been successfully completed for the following organisations

ABM Chemicals
Adams Foods
AH Marks
Akzo Chemicals
Albright and Wilson
Allied Breweries
Allied Colloids
Ambrosia
Applied Chemicals
Ashland Chemicals
Associated Co-op
Associated Fresh Foods
Associated Ocel

Babcock Woodall Duckham
Badger Catalytic
Bar Bright
Bass Brewery
BCC
Bechtel
Beecham Pharmaceuticals
Beechams Foods
Beechams Products
Bark Spencer
Bierrum & Partners
Birds Eye-Walls
BOC Chemicals
Bordyke Chemicals
Bowner & Kirkland
BP Chemicals
Bridge Farm Dairies
Bridgend Creameries
Brightside and Carbrooke Dairies
Bristol Chemicals
British Aerospace
British Cellophane
British Chrome and Chemicals
British Nuclear Fuels
British Rail
British Sidac
British Sugar Corporation
Brook Bond Oxo
Bruntons
BSC Beighton
BSC Ebbw Vale
BSC Gartcosh
BSC Llanwern
BSC Port Talbot
BSC Scunthorpe
BSC Shotton
BSC Trostre
BSC Velindre
BTR Vitoline

C Shipman
Cadbury Schweppes
Campbell Soups
Copper Pass
Champlain Protex
Chemical Engineering Construction
CIBA-Geigy
Clayton Aniline
Coca Cola Bottlers
Cold Drawn Tubes
Colmans Foods
Commonwealth Smelting
Corn Products Corp
Corona
Costain
County Dairies
Courtaulds
Courtaulds Acetate
Crane
Griffalls Windows
CTS Thor Chemicals
CWS
CWS Meat
CWS Soft Drinks

Dairycrest
Daniel Thwaites
Davy International
Diamond Shamrock
Dista Products
Distillers
Dorr Oliver
Dow Chemical
Du Pont

Dysons
E Thomas Foods
Edinburgh Dairies
English Metal Powder
Esso Petroleum
Ewbank Preece
Express Dairy Foods
Exxon Chemicals

FBC
Ferro
Fine Organics
Fisons
Flour Daniel
Foster Wheeler
Foxs Glacier Mints

Gelatine Products
Gestetner
Glaxo
GNCS Dairy
Greenhall Whitley
Guinness Plc

Handsworth Dairies
Haverhill Meat Products
Healds Dairies
Henry Wiggins
Hercules Powders
Hereford Galvanisers
Hickson & Welch
HJ Heinz
Hollands Pies
Holliday Dyes and Chemicals
Home Counties Dairies
Horsall Graphic Products
Howson Algraphy
HP Bulmer
Hydro Norsk
Hydral Products

ICI Ardeer
ICI Billingham
ICI Clitheroe
ICI Grangemouth
ICI Huddersfield
ICI Radcliffe
ICI Runcorn
ICI Severnside
ICI Stevenston
ICI Thornton
ICI Trafford Park
ICI Wilton
IDC
IMI Marston Radiators
IMI Refineries
Inco Europe
Ind Coupe
International Flavour and Fragrances
ISC Chemicals

J Crossfield
J & J Makin
Jobs Dairy
John Brown Engineers & Constructors
Johnson and Nephew
Joseph Terry
JR Crompton

Kawner
Ken Perret
Kentish Town Sewerage Works
Kodak

L Noel
Lancashire Chemicals
Laporte Chemicals
Laporte Industries
Lea Valley Dairy
Leather Chemicals
LEC Refrigeration
Lee Steel Wire
Leek Chemicals
Leyland Vehicles
Libby McNeill and Libby
Lincoln Co-op
Liverpool Tanning

Lubrisol

May & Baker
McKechnie Chemicals
McNabs Ice Cream
Merck, Sharpe and Dohme
Midland County
MMB
Monsanto

National Smokeless Fuels
Nelsons Acetate
Nestle
Nestle
Nestle
New Tungstone Batteries
Newforge Foods
Norsk Hydro
Northern Dairies
North Yorkshire Co-op

Painter Brothers

Queensferry Sewerage Works

Ram Brewery
Rank Film Laboratories
Rechem
Rexo Chemicals
RF Brookes
RHM Foods
Rhône Poulenc
Robirch
Roche Products
ROF Bishopston
ROF Bridgewater
ROF Lower Darwen
Rothen Galvanising
Rohms and Hass
Rolls Royce
Ross Food Products
Rossendale Sewerage Works
Rylands Whitecross

Schweppes
SCM Chemicals
Scottish Agricultural Industries
Scottish & Newcastle Breweries
Scottish MMB
Shell
Simon Carves
Sperry Gyroscope
St Ivel
Stangade Soft Drinks
Steveley Chemicals
Steeley Minerals
Sterling Organics
Stevenage Sewerage Works

Tate & Lyle
Tavener & Rutledge
Tennent Caledonian
Thames Board Mills
Tileman (SE)
Tioxide
Tullis Russell

UKF Fertilizers
Unichema Chemicals
Unigate

Van den Berghs

Walls
Walsden Printing
Warwick Chemicals
Watney Mann
Wellington Cement
WH Brakespear
Whitbread
Wiggins Teape
Winthrop
Waden Steel and Fastner
Wolverhampton & Dudley Breweries
Wythenshaw Dairy

Yorkshire Chemicals

The information contained on Pages 28-31 of this brochure has been compiled from the records of the Accrington Brick and Tile Company and Marshalls Clay Products Ltd. It is based on the details provided at the time of ordering by the contractor or purchasing agent. Any inaccuracies or omissions are regretted.

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